

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In re:	)	
	)	
Fostering Innovation and Investment	)	GN Docket No. 09-157
in the Wireless Communications Market	)	
	)	
A National Broadband Plan for	)	GN Docket No. 09-51
Our Future	)	

**COMMENTS OF CELLULAR SOUTH, INC.**

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## SUMMARY

Innovation and investment have been the engines driving the phenomenal growth of the wireless industry. The services produced by this innovation and investment have benefited consumers, supported the activities of public safety agencies, health care providers, educational institutions, and other important sectors, and helped to buttress the national economy.

Because of the importance of wireless innovation and investment, the Commission should be commended for initiating this *Notice of Inquiry* proceeding to examine further steps the Commission can take to continue its efforts to encourage further innovation and investment.

Cellular South, Inc. (“Cellular South”) believes that the Commission’s policies for the assignment, allocation, and utilization of spectrum are a key component of the agency’s efforts to stimulate wireless innovation and investment. The Commission has enjoyed considerable success in devising spectrum policies and competitive bidding mechanisms that have resulted in the efficient use of spectrum, thus serving consumers and advancing the public interest. Cellular South encourages the Commission to continue to treat its spectrum policies as one of the cornerstones of its plans for the promotion of innovation and investment.

Cellular South is concerned, however, that recent developments affecting the 700 MHz Band are threatening to undo the Commission’s objective of ensuring that 700 MHz spectrum is fully utilized to bring broadband services and other services to the wireless marketplace, especially to consumers in rural areas. Specifically, small rural and regional carriers that acquired Lower A Block spectrum in Auction 73 are facing the prospect of being unable to effectively utilize the spectrum because of the unavailability of equipment capable of operation in the Lower A Block.

Equipment manufacturers, responding to the large national wireless carriers' preferences for equipment capable of operating solely in those blocks of the 700 MHz Band in which these carriers have their principal 700 MHz spectrum holdings, are proceeding with the development of equipment exclusively for those blocks. As a result, the manufacturers currently do not have plans to produce equipment that will operate in the Lower A Block, which means that there are no plans to develop equipment that is interoperable across the Lower 700 MHz Band.

If this situation were allowed to stand, then Lower A Block spectrum will not be put to its best and most valuable use by the small rural and regional carriers holding licenses for this spectrum. Such a result would frustrate the Commission's objectives in the 700 MHz proceeding, undercut the agency's efforts to encourage wireless innovation and investment, and deprive consumers in rural areas of broadband and other services, including the ability to roam in service areas utilizing other spectrum blocks in the 700 MHz Band. Similarly, customers of other 700 MHz Band carriers would not be able to roam in the Lower A Block, depriving small rural and regional carriers of revenues needed to invest in infrastructure and to deploy broadband and other services in the Lower A Block. Consumers will also pay more for equipment due to the reduced economies of scale that result when the Lower A Block spectrum is excluded from devices.

On September 29, 2009, Cellular South joined with other members of the 700 MHz Block A Good Faith Purchasers Alliance in submitting a petition for rulemaking requesting the Commission to address the equipment manufacture problems now threatening to devalue Lower A Block spectrum. In addition, Cellular South urges the Commission in this *Notice of Inquiry* proceeding to examine the ways in which unanticipated marketplace developments can undermine spectrum policies that otherwise would enhance innovation and investment, and to

consider the types of monitoring and corrective mechanisms that should be in place to prevent and eliminate such threats to the Commission's spectrum utilization objectives.

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**COMMENTS**

Cellular South, Inc. (“Cellular South”), by its attorneys, hereby submits Comments in response to a Notice of Inquiry adopted by the Commission, the purposes of which include examining factors that encourage innovation and investment in the wireless industry and identifying further steps the Commission should take to promote continued innovation and investment.<sup>1</sup>

Cellular South is the nation’s largest privately-held wireless carrier.<sup>2</sup> It is a regional Code Division Multiple Access carrier serving more than 800,000 customers primarily in rural areas. It provides cellular service in nine Cellular Market Areas (“CMA”) in Mississippi, consisting of two Metropolitan Statistical Areas and seven Rural Service Areas. Cellular South

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<sup>1</sup> See Fostering Innovation and Investment in the Wireless Communications Market, GN Docket No. 09-157, A National Broadband Plan for Our Future, GN Docket No. 09-51, *Notice of Inquiry*, FCC 09-66, rel. Aug. 27, 2009 (“*Notice of Inquiry*”). Comments are due in this proceeding not later than September 30, 2009. See Commission Revises Applicable Ex Parte Procedures for Wireless Innovation and Investment Notice of Inquiry (FCC 09-66) and Extends Comment and Reply Comment Deadlines, *Public Notice*, FCC 09-73, rel. Sept. 10, 2009.

<sup>2</sup> Cellular South was the second largest privately-held wireless carrier prior to consummation of the merger between Alltel Corporation (“Alltel”) and Verizon Wireless.

also provides Personal Communications Service (“PCS”) in twelve Mississippi Basic Trading Areas. In addition, Cellular South holds authorizations to provide PCS, Advanced Wireless Service and/or 700 MHz Service in portions of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, Tennessee, and Virginia.

## **I. INTRODUCTION.**

The Commission’s initiative to focus attention on innovation and investment in the wireless telecommunications marketplace, and to explore concrete steps the agency can take to promote innovation and investment,<sup>3</sup> is an encouraging development because the interplay between the Commission’s regulatory initiatives and the wireless services marketplace has a significant and ongoing impact on the course of innovation and on investment decisions made by wireless service providers. For these reasons, Cellular South welcomes this opportunity to address questions raised by the Commission in this proceeding, and to suggest policy initiatives that would help to foster innovation and investment.

Cellular South will focus on a “case study” that illuminates challenges that the Commission faces not only in promoting wireless innovation and investment, but also in guarding against marketplace developments and practices that can work to undermine incentives for innovation and investment as well as threaten the efficient use of commercial spectrum. Specifically, Cellular South will describe recent developments with respect to efforts to utilize Lower 700 MHz Band paired A Block spectrum, in order to demonstrate how the Commission’s policies can be compromised if the agency is not vigilant in monitoring marketplace activities and if the Commission does not act when necessary to ensure that its policies continue to help to drive favorable market outcomes and efficient use of spectrum.

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<sup>3</sup> *Notice of Inquiry* at para. 1.

Cellular South also notes that it has recently joined with other members of the 700 MHz Block A Good Faith Purchasers Alliance (“Purchasers Alliance”) in submitting a rulemaking petition seeking Commission action to address the 700 MHz problems that are discussed in the following sections of these Comments.<sup>4</sup> Cellular South’s purpose of presenting the 700 MHz case study here is to explain the implications of recent developments regarding Lower A Block spectrum for the Commission’s wireless innovation and investment policies, and to suggest strategies the Commission should consider following on a going-forward basis as it devises mechanisms and policies to promote innovation and investment.

## **II. THE COMMISSION PLAYS A KEY ROLE IN SUPPORTING WIRELESS INNOVATION AND INVESTMENT.**

The Commission is right to claim that its policies have helped to foster a wireless ecosystem rich with value chains marked by technological innovation and robust investment.<sup>5</sup> Moreover, this *Notice of Inquiry* is reflective of the fact that the Commission intends to place a priority on its continued efforts to play an important role in enhancing the environment for wireless innovation and investment.

In responding to the Commission’s question regarding “what elements of [its] rules and policies have been successful in stimulating and promoting innovation and investment[,]”<sup>6</sup> a leading example is the agency’s successful spectrum allocation, assignment, and competitive

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<sup>4</sup> See 700 MHz Block A Good Faith Purchasers Alliance, Petition for Rulemaking Regarding the Need for 700 MHz Mobile Equipment To Be Capable of Operating on All Paired Commercial 700 MHz Frequency Blocks, RM-\_\_\_\_, filed Sept. 29, 2009. The petition demonstrates that the Nation’s two largest wireless carriers have succeeded in getting a Long-Term Evolution standards group to establish self-serving band classes for 700 MHz equipment, and requests that the Commission adopt rules prohibiting restrictive mobile equipment banding arrangements and also suspend (during the pendency of the rulemaking proceeding) equipment authorizations for all 700 MHz equipment unless the equipment is capable of operating on all paired commercial 700 MHz spectrum blocks.

<sup>5</sup> *Notice of Inquiry* at paras. 3-4 & n.2.

<sup>6</sup> *Id.* at para. 11; see *id.* at para. 20.



bidding process. In recent years, the Commission has taken steps to increase the amount of spectrum available for commercial use, to develop more flexible and market-oriented models for spectrum allocation and assignment, and to enable the purchase and sale of spectrum licenses in secondary markets.<sup>7</sup> These progressive spectrum policies have spurred technological innovations aimed at maximizing the efficient and valuable use of spectrum, and these innovations in turn have propelled investment in wireless infrastructure, equipment, and services.

Recent spectrum auctions have not only helped to minimize spectrum-related entry barriers<sup>8</sup> but have also promoted innovation and investment. The 700 MHz spectrum auction is a case in point. The 700 MHz spectrum auction (designated as Auction 73 and concluded on March 18, 2008) resulted in bids covering 1,091 licenses and totaling \$19.6 billion.<sup>9</sup> Auction 73 enabled a “diverse mix of new entrants and small regional and rural providers . . . [to] acquir[e] access to spectrum needed to deploy the next generation of wireless networks.”<sup>10</sup> Small and rural wireless service providers “won spectrum that almost covers the entire United States.”<sup>11</sup>

As discussed in the following sections, however, recent developments relating to the 700 MHz Band demonstrate that there are barriers to the promotion of “greater access to spectrum and more efficient and valuable use of spectrum,”<sup>12</sup> and that the Commission must work to eliminate these barriers.

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<sup>7</sup> See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, WT Docket No. 08-27, *Thirteenth Report*, 24 FCC Rcd 6185, 6220 (paras. 65-67) (2009) (“*Thirteenth Report*”).

<sup>8</sup> *Id.* at 6220 (para. 68).

<sup>9</sup> Auction of 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction 73, *Public Notice*, Report No. AUC-08-73-I (Auction 73), 23 FCC Rcd 4572, 4572 (para. 2) (2008).

<sup>10</sup> *Thirteenth Report*, 24 FCC Rcd at 6221 (para. 68).

<sup>11</sup> *Id.*

<sup>12</sup> *Notice of Inquiry* at para. 20.

### **III. THE LOWER 700 MHz BAND A BLOCK IS A CASE STUDY OF ISSUES AFFECTING THE PROMOTION OF WIRELESS INNOVATION AND INVESTMENT.**

Cellular South will examine in this section the goals and objectives established by the Commission for the utilization of 700 MHz spectrum, the manner in which these goals and objectives are being threatened by recent developments relating to the Lower 700 MHz A Block, and the implications of these developments for the formulation of ongoing Commission policies to promote wireless innovation and investment. This 700 MHz case study illustrates that policing market developments may be as important as establishing effective spectrum utilization policies in order to effectively foster innovation and investment.

#### **A. The Commission Has Established Important Goals and Objectives for Utilization of 700 MHz Spectrum.**

Efficient utilization of 700 MHz spectrum will play a significant role in deployment of wireless broadband services throughout the Nation. The spectrum “is particularly well-suited for wireless broadband services[.]”<sup>13</sup> a factor which was taken into account by the Commission in determining that its goals for the 700 MHz Band are:

to promote dissemination of licenses among a wide variety of applicants, accommodate the competing need for both large and small licensing areas, meet the various needs expressed by potential entrants seeking access to spectrum and incumbents seeking additional spectrum, and provide for large spectrum blocks that can facilitate broadband deployment in the band.<sup>14</sup>

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<sup>13</sup> Service Rules for the 698-746, 747-762 and 777-792 MHz Bands; Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones; Biennial Regulatory Review -- Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services; Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; and Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Second Report and Order*, 22 FCC Rcd 15289, 15316 (para. 64) (2007) (“700 MHz *Second Report and Order*”).

<sup>14</sup> *Id.*

The Commission has also sought to take advantage of the excellent propagation characteristics of the 700 MHz Band in order to “promote the provision of innovative services to consumers throughout the license areas, including in rural areas.”<sup>15</sup>

The Commission established a 12-megahertz A Block in the Lower 700 MHz Band for commercial use, consisting of 6-megahertz paired blocks, and established Economic Areas (“EA”) as the service areas for the A Block, resulting in 176 licenses available for the block.<sup>16</sup> The Commission noted that its decision to locate the Lower A Block next to a 12-megahertz CMA block (the 6-megahertz paired B Block) would enable smaller providers to benefit from both the EA and CMA blocks,<sup>17</sup> thus giving them flexibility in implementing their business plans.<sup>18</sup> The Commission indicated that its goal in establishing the Lower A Block was to “create opportunities for a variety of bidders, including small and regional providers, to acquire licenses for small geographic areas in the Lower 700 MHz Band.”<sup>19</sup>

The Commission also noted, as a general matter, that its decision to use competitive bidding to assign commercial 700 MHz licenses “serves the public interest by assigning licenses to the parties that value the licenses the most. Such parties are presumed to be most likely to put the public spectrum resource to its most effective use.”<sup>20</sup> The agency’s expectation, therefore, is that service providers obtaining Lower A Block licenses will be in a position to utilize the

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<sup>15</sup> *Id.* at 15348 (para. 154).

<sup>16</sup> *Id.* at 15324 (para. 83).

<sup>17</sup> *Id.* at 15325 (para. 85) (finding that, “[b]ecause the A Block is next to a second 12-megahertz block of spectrum, the B Block, that will be licensed using CMAs, small, regional, and rural providers will also have opportunities to combine these blocks”).

<sup>18</sup> *Id.* at 15324 (para. 84). The Commission also recognized the fact that small and rural wireless carriers “may have limited access to capital . . .” *Id.* at 15384 (para. 258).

<sup>19</sup> *Id.* at 15325 (para. 85) (footnote omitted).

<sup>20</sup> *Id.* at 15385 (para. 259) (footnote omitted) (citing Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Second Report and Order*, 9 FCC Rcd 2348, 2349-50 (paras. 3-7) (1994)).

licensed spectrum in an optimum manner, including the deployment of wireless broadband services in rural and small regional markets. The Commission also expressed confidence that, “[g]iven the number of actual wireless providers and potential broadband competitors, it is unlikely that . . . large wireless carriers [or other large service providers] would be able to behave in an anticompetitive manner as a result of any potential acquisition of 700 MHz spectrum.”<sup>21</sup>

Nonetheless, some competitive concerns were expressed by Commissioners in connection with the Commission’s decisions for the utilization of 700 MHz spectrum.<sup>22</sup> Commissioner Copps, in criticizing the decision not to use a wholesale carrier model to encourage competitive entry, noted that “we have seen a wave of consolidation among wireless incumbents that has substantially increased the hurdles facing potential new entrants. And now we live in a world where the two leading wireless companies are owned in whole or in part by the leading wireline telephone companies.”<sup>23</sup> Commission McDowell added a pointed criticism that reflected his concerns about how spectrum would be controlled and utilized in the Lower 700 MHz Band:

[T]he encumbered spectrum structure [for the Upper 700 MHz Band] supported by the majority will force large wealthy bidders away from the Upper Band and into the smaller, unencumbered blocks in the Lower Band. Smaller players, especially rural companies, will be unable to match the higher bids of the well-funded giants. Depriving the nascent 700 MHz market place of smaller new entrants will result in less innovation and competition, not more. Consumers could be short-changed as a result. And it is small new entrants that should be as important to this equation as large new entrants.<sup>24</sup>

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<sup>21</sup> *Id.* at 15384 (para. 256).

<sup>22</sup> Competitive issues raised by impediments to the utilization of Lower 700 MHz Band A Block spectrum are also discussed by Cellular South in its Comments regarding the Commission’s Notice of Inquiry concerning mobile wireless competitive market conditions, which are being filed in WT Docket No. 09-66 contemporaneously with these Comments. *See* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless including Commercial Mobile Services, WT Docket No. 09-66, *Notice of Inquiry*, FCC 09-67, rel. Aug. 27, 2009.

<sup>23</sup> *Id.* at 15562 (Statement of Commissioner Michael J. Copps, Approving in Part, Concurring in Part).

<sup>24</sup> *Id.* at 15572 (Statement of Commissioner Robert M. McDowell, Approving in Part, Dissenting in Part).

As discussed in the following section, these concerns about the size of wireless incumbents and problems that could be faced by small rural carriers are now materializing in the Lower A Block.

**B. The Commission’s Objectives for Utilization of the Lower 700 MHz Band A Block Spectrum Are Being Undermined by Recent Marketplace Developments.**

A significant problem has emerged since the 700 MHz Band auction was completed last year. The rural and regional carriers that obtained Lower A Block licenses in the 700 MHz auction are facing artificial technical obstacles that threaten to affect the carriers’ plans to deploy broadband infrastructure using Lower A Block spectrum.

Based on current indications, it appears that equipment manufacturers are not likely to develop and produce equipment for the Lower A Block spectrum. Thus far, three band classes have been established for commercial spectrum suitable for two-way use in the Upper and Lower 700 MHz Bands.<sup>25</sup> These three band classes, which provide the framework for the development of equipment for use with commercial paired 700 MHz spectrum, are as follows:

BAND CLASS	EQUIPMENT CAN BE USED IN:
12	Lower A Block Lower B Block Lower C Block
13	Upper C Block
17	Lower B Block Lower C Block

Equipment manufacturers are in the process of developing devices for Band Class 13 and Band Class 17, but they have no current plans to develop equipment in Band Class 12—the one Band Class that includes all three blocks of paired, commercial spectrum in the Lower Band.

The principal reason for this is that the two largest national carriers—Verizon Wireless and AT&T Mobility—are pushing equipment manufacturers to develop substantial volumes of

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<sup>25</sup> The band classes for the 700 MHz Band are developed pursuant to the Third Generation Partnership Project (“3GPP”) Technical Specifications and Technical Reports Release 8. See <http://www.3gpp.org>.

equipment that will work in Band Class 13 or Band Class 17 in the 700 MHz spectrum, but that will not work in Band Class 12 (which includes the Lower A Block).

The initial standards developed by 3GPP pursuant to Release 8 called for establishing Band Class 12, which included the A, B, and C Blocks in the Lower 700 MHz Band. AT&T Mobility, however, successfully pressed for the establishment of an additional category—Band Class 17—which is the same as Band Class 12 except that it excludes the Lower A Block.<sup>26</sup> AT&T Mobility’s apparent strategy will now enable it to order Band Class 17 equipment in bulk, which serves its needs but which threatens to undermine efficient utilization of Lower A Block spectrum.

Verizon Wireless, meanwhile, acquired Lower A Block spectrum licenses in Auction 73, but—given its extensive license holdings in the Upper C Block<sup>27</sup>—Verizon Wireless thus far has not shown signs of any plans to utilize its Lower A Block spectrum, nor has it expressed any interest in requesting equipment manufacturers to develop devices that will work in the Lower A Block. This is clear from the developing ecosystem for Band Class 13 equipment—Verizon’s Upper Band C Block— and the lack of any plans for equipment in the one Band Class that includes Verizon Wireless’ Lower A Block spectrum, Band Class 12.

These marketplace developments pose a significant problem for small rural and regional wireless carriers. These small carriers holding Lower A Block licenses are faced with the uneconomic choice of ordering devices for the Lower A Block in small quantities (relative to the size of orders likely to be placed by AT&T Mobility and Verizon Wireless for devices that will

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<sup>26</sup> AT&T Mobility bid selectively in the 700 MHz auction, acquiring B Block spectrum in key markets. See Kevin Fitchard, “Auction winners lay bare 700 MHz plans,” TELEPHONY ONLINE, Apr. 4, 2008, accessed at <http://telephonyonline.com/wireless/news/winners-700-mhz-plans-0404/>.

<sup>27</sup> Verizon Wireless “won the lion’s share of the Auction’s C Block, giving it 22 MHz of coverage . . . in the lower 48 U.S. states and Hawaii.” *Id.*

work in the other 700 MHz Blocks), assuming that these devices will be built at all. The inability of small rural and regional carriers to purchase Lower A Block equipment in bulk significantly increases the cost of equipment purchases for these carriers.

This problem is exacerbated by the fact that interference issues present in the Lower A Block require that devices developed for use in this block must have filters to lessen the interference problems, thus further increasing the cost of Lower A Block devices. Although the increment of this additional cost would not likely be substantial, it nonetheless adds to the burdens faced by the small carriers as a result of the current decision not to include the Lower A Block in a high-volume equipment category.

Of course, this also results in higher costs for consumers. The most obvious example is the higher price that consumers will pay for Lower A Block equipment that will not be produced in bulk. Additionally, many consumers (including large numbers of rural consumers) will have devices that have limited compatibility with other network operators. This will not only restrict roaming for consumers, but it will deny many consumers the opportunity to change wireless carriers while keeping the same 700 MHz device.

If this situation is allowed to persist, the consequences will be problematic for small rural and regional carriers and their customers. Moreover, the processes that are controlling the manner in which equipment will be developed and produced for use in commercial spectrum in the 700 MHz Band point out the need for the Commission to take steps “to fulfill strategic objectives of fostering [wireless] investment and innovation for our country.”<sup>28</sup>

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<sup>28</sup> Written Statement of Julius Genachowski, Chairman, FCC, before the Committee on Energy and Commerce, Subcommittee on Communications, Technology, and the Internet, U.S. House of Representatives, Sept. 17, 2009, at 2.

**C. Developments Affecting the Lower A Block Have Implications for Commission Policies Designed To Promote Wireless Innovation and Investment and for Its National Broadband Plan.**

In the *Notice of Inquiry* the Commission stresses the importance of ensuring that innovators have the ability to gain access to suitable spectrum for new services,<sup>29</sup> and that “economic efficiency” should be one of the constructs guiding the agency’s efforts to promote efficient spectrum use.<sup>30</sup> The Commission also applauds the fact that technology “is rapidly transforming communications networks and devices so that they perform multiple functions and access multiple frequencies as available.”<sup>31</sup>

The problems that have emerged in the Lower 700 MHz Band A Block, discussed in the previous section, threaten to diminish the ability of innovators to utilize suitable spectrum, which, in turn, risks a reduction in the economically efficient use of this spectrum. These problems reveal marketplace realities that the Commission should take into account as it seeks to encourage wireless innovation and investment.

Commission policies that promote sufficient access to suitable spectrum, through the use of competitive bidding mechanisms, secondary markets, and other policies, are not always sufficient to foster innovation and investment. The case study presented in these Comments shows that the Commission’s success in making suitable spectrum available for innovative uses can be negated by marketplace decisions that impede the ability of small rural and regional carriers to actually use the spectrum.

As Commissioner Copps has pointed out, as a result of extensive wireless industry consolidations we now live in a world in which two large nationwide carriers increasingly

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<sup>29</sup> *Notice of Inquiry* at para. 29.

<sup>30</sup> *Id.* at para. 40. The Commission defines “economic efficiency” to mean the use of spectrum resources to generate the highest value to the public. *Id.*

<sup>31</sup> *Id.* at para. 29. *See id.* at paras. 51, 55.



control the wireless marketplace. The 700 MHz Band auction demonstrates the power of these carriers in acquiring valuable spectrum, and the process by which equipment is being developed for use in the 700 MHz Band illustrates the sway these carriers have in affecting the availability of equipment for the various spectrum blocks in the 700 MHz Band.

As the Commission examines in this proceeding the nexus between its policies and the promotion of wireless innovation and investment, it should draw lessons from the Lower A Block case study that Cellular South has presented. If the Commission does not proactively monitor market developments in the wake of the agency’s use of competitive bidding to award spectrum licenses—and if the Commission does not act forcefully when necessary to address these developments—then wireless innovation and investment that could have been successfully promoted by the auction process risks being foreclosed.

Small rural and regional carriers are now confronted with the prospect of their being unable to fully utilize Lower A Block spectrum acquired in Auction 73 because equipment that is usable both in the Lower A Block and in other blocks in the 700 MHz Band may not be produced in bulk, if at all. Investment in infrastructure and deployment of next-generation services using the Lower A Block—including broadband services utilizing Long Term Evolution (“LTE”) technology in rural areas—will be curtailed if these carriers are unable to supply usable and affordable wireless devices to their end user customers.

The achievement of economic efficiency in the use of the Lower A Block spectrum will be jeopardized as a result. For example, subscribers of small rural and regional carriers in the Lower A Block will be restricted in their ability to roam in other blocks of the 700 MHz Band if manufacturers do not produce equipment that can operate across all blocks in the Band.<sup>32</sup>

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<sup>32</sup> The Commission has recognized the importance of roaming, indicating “that today CMRS [commercial mobile radio service] consumers increasingly rely on mobile telephony services and they reasonably

A failure to produce equipment that is usable across multiple spectrum blocks in the 700 MHz Band will also harm customers of the largest carriers. If customers of carriers operating in other 700 MHz Band spectrum blocks (such as AT&T Mobility and Verizon Wireless) are not provided with devices capable of operating in the Lower A Block, then these customers would not be able to roam by using the facilities of small rural and regional carriers operating in Lower A Block service areas that are not served by carriers such as AT&T Mobility and Verizon Wireless. Such a result would be inconsistent with Commission policies favoring the availability of roaming for the benefit of wireless consumers.

Moreover, the Commission's assumption that the parties obtaining licenses in the 700 MHz proceeding would be those most likely to put spectrum to its most effective use will be proven wrong if rural and regional licensees reduce their investment due to the lack of equipment for the Lower A Block spectrum. This will undercut efforts to bring mobile services—including mobile broadband—to consumers in rural and regional markets which in turn threatens to squander spectrum that is ideally suited for broadband.

Although small rural and regional carriers acquired Lower A Block spectrum with the intention of putting the spectrum to its most efficient and valuable use, their ability to do so is being jeopardized by decisions now being made regarding the development of devices and equipment for the Lower A Block. Such a result would be a complete contradiction of one of the Commission's central goals in Auction 73: to make sure that 700 MHz spectrum is used in an economically efficient manner in order to produce the highest value for the public, including most importantly the deployment of broadband services in rural areas.

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expect to continue their wireless communications even when they are out of their home network area.” Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 15817, 15819 (para. 3) (2007), *petitions for recon. filed*.

In this regard, the Commission's efforts to develop a plan for the Nation's use of broadband services,<sup>33</sup> especially with respect to policies designed to promote the deployment of broadband in rural areas,<sup>34</sup> are also affected by the problems described in these comments that threaten the utilization of Lower 700 MHz Band A Block spectrum. A central component of the National Broadband Plan should address measures that can be taken to make optimum use of the Nation's spectrum resources as a means of facilitating and enhancing broadband deployment and availability to all the people of the United States. The Lower 700 MHz Band A Block case study demonstrates that the best laid plans for spectrum utilization for broadband can be upset by market developments that interfere with wireless carriers' efforts to deploy broadband services in rural areas.

In Cellular South's view, the Lower A Block case study signals the need for the Commission to develop a more holistic approach to its development of spectrum policies, in order to ensure that spectrum utilization is in fact economically efficient and that wireless innovation and investment are effectively promoted.<sup>35</sup> The use of spectrum allocation and assignment mechanisms and competitive bidding mechanisms may not be adequate in and of themselves to accomplish the Commission's goals of innovation and investment.

The case study shows that wireless innovation and investment can fall prey to unanticipated marketplace developments that pose great risk to the Commission's policies and

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<sup>33</sup> See A National Broadband Plan for Our Future, GN Docket No. 09-51, *Notice of Inquiry*, 24 FCC Rcd 4342 (2009). The American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) "authorizes the Commission to develop a National Broadband Plan to ensure that all people of the United States have access to broadband capability." *Notice of Inquiry* at para. 8, n.4.

<sup>34</sup> See generally Michael J. Copps, Acting Chairman, FCC, BRINGING BROADBAND TO RURAL AMERICA: REPORT ON A RURAL BROADBAND STRATEGY (May 22, 2009).

<sup>35</sup> See *Notice of Inquiry* at para. 11.

goals. It is important for the Commission to make it evident that one component of its innovation and investment policies is the agency's willingness and authority to intervene for the purpose of addressing marketplace developments that are likely to have an adverse effect on these policies.

To this end, Cellular South has joined with other members of the Purchasers Alliance in advocating in a separate rulemaking petition that the Commission should require that equipment developed and manufactured for use in the 700 MHz Band should be usable in all paired commercial spectrum blocks in the Band.

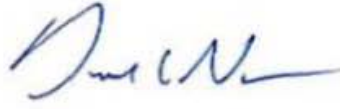
#### **IV. CONCLUSION.**

The availability and optimum use of spectrum is critically important to the Commission's objective of fostering wireless innovation and investment. Also important is the interplay between the Commission's policies and the workings of the wireless marketplace.

The Commission has been successful in designing competitive bidding mechanisms, as well as other strategies and policies that have been effective in enabling innovators to generate investment and to change the landscape of wireless services available to consumers. But the 700 MHz Band case study presented by Cellular South in these Comments illustrates that practices of large players in the wireless marketplace can frustrate the Commission's objectives for innovation and investment, and can threaten the ability of small rural and regional carriers to make optimum use of spectrum for the deployment of broadband services and for other purposes.

Cellular South therefore encourages the Commission to take a comprehensive approach to its development of policies favoring innovation and investment, in order to ensure that its intended results are not placed in jeopardy. Such an approach should include a willingness to intervene in the wireless market as necessary to protect the Commission's policies and achieve the intended results of these policies.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "David L. Nace".

David L. Nace

John Cimko

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September 30, 2009

CERTIFICATE OF SERVICE

I, Linda J. Evans, hereby certify that on this 30<sup>th</sup> day of September, 2009, copies of the foregoing COMMENTS OF CELLULAR SOUTH, INC. were sent by e-mail, in pdf format, to the following:

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Linda J. Evans